

In Witness Whereof, I have hereunto set my hand and affixed my official seal, at my office in the County of Monterey, State of California, the day and year in this certificate first above written.

(Seal) FRANK C. JAKOBS,
Notary Public in and for the County of Monterey, State of California.

My commission expires February 17, 1933.

"FULL STEAM" OR CAUTION IN SOCIAL SECURITY

When the Committee on the Costs of Medical Care brought in its final report, *The Journal*¹ pointed out that the choice seemed to lie with the medical profession and the public as to whether or not changes in the nature of medical practice were to come by evolution or by revolution. In the years that have elapsed, the public seems wisely to have chosen to proceed cautiously and carefully rather than to order "full steam ahead." Nevertheless, proponents of socialized medicine continue to urge and to make propaganda for the revolution that the medical profession and the public want to avoid. Conspicuous among those who demand haste are Michael Davis, representing the Rosenwald Foundation; Nathan Sinai, who has at various times represented various groups, and Dr. Hugh Cabot, who seems mostly to represent himself.

In a recent discussion on the subject of social security, held in the Graduate School of Business Administration of Harvard University, these three proponents of speed again stated their points of view. Doctor Cabot did not hesitate to say that the medical profession does not seem to be able to fit itself into an economic age and that it should long since have realized that it must become a business and cease to be a profession. Mr. Sinai deplored the manner in which his plans for Michigan had been opposed and indicated his impression that the medical profession in this country is an obstructionist body. Mr. Davis, who has on previous occasions stated his belief that medicine proceeds on a bicycle while civilization proceeds in an airplane, again bemoaned the delay of the American medical profession in adopting some of the plans which he and his associates of the Rosenwald Foundation have been so busily pushing during the last four years. In the course of their discussions, these proponents of socialized medicine condemned the principles adopted by the House of Delegates of the American Medical Association at the Cleveland and subsequent sessions as being planned to delay rather than to hasten progress. Anyone familiar with the changes that have occurred, with the experiments that are now under way, and with the statements made by representatives of organized medicine during the past three years, will know that the allegations of these three propagandists are not warranted. The studies made by the Bureau of Medical Economics of the American Medical Association indicate that already many an ill-founded and unwarranted experiment in changing the nature of medical practice has failed and disappeared. As yet there is no scientific evidence to indicate that any one of the plans now in effect represents the ideal.

The substantial progress of medicine has been brought about by a system of trial, of test and experiment, which is itself responsible for the substantial character of the progress. There is no more reason why medicine should discard its scientific methods in performing social experiments than there is reason for discarding scientific methods and embarking on wishful thinking in the laboratory and faith-healing in the hospital. Reckless experimenters in the so-called social sciences may shout "full steam ahead!" The organization and structure of scientific medicine is more likely to be salvaged from the wreckage into which many of the other social and economic organizations are plunging by observing the caution which medical leaders know is imperative for a safe advance.—*Journal of the American Medical Association*, May 16, 1936.

¹ The Committee on the Costs of Medical Care, editorial, J. A. M. A., 99:1950 (Dec. 3), 1932.

MORTALITY FROM CERTAIN DISEASES AMONG CHILDREN UNDER FIFTEEN YEARS OF AGE IN CALIFORNIA 1906-1934

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PART II*

During school age, deaths from whooping-cough are not common, and when they do occur are usually in the lower brackets of 5 to 14 age group. They are somewhat constant in numbers during the entire period studied, but because of the increase in population of this group, we find the rates decreasing from 2.7 per 100,000 in 1906-1909 to 0.6 per 100,000 group population in 1930-1934.

Mortality from Whooping Cough, 1906-1934

Years	Under 1 yr.		1-4 years		5-14 years	
	Number	Rate	Number	Rate	Number	Rate
1906-1909	380	258.1	234	41.4	36	2.7
1910-1914	618	284.6	435	51.5	49	2.5
1915-1919	519	205.9	346	33.9	31	1.3
1920-1924	814	274.2	478	38.6	58	1.9
1925-1929	876	249.2	510	34.0	44	1.1
1930-1934	545	136.3	305	17.7	27	0.6

DIPHTHERIA

During the twenty-nine years under study, deaths from diphtheria have decreased markedly in children under fifteen years of age. Death rates from this cause among this group have fallen from 55.9 to 10.1 or 82.0 per cent between the first and the last period studied, the largest reduction being among children 5 to 14 years of age. As in scarlet fever and whooping-cough, this reduction has been gradual and continuous with the exception of the years 1920-1924, when there was a rise above the previous years.

During 1906-1909, there are sixty-three children under one year of age who died, with a rate of 42.8 per 100,000 children in this class. This fluctuates, with a rise in 1920-1924 to 32.0 per 100,000 group population with ninety-five deaths and then falls to a low point during 1930-1934 of forty-eight deaths, or a rate of 12.0 per 100,000 group population.

The age group 1 to 4 contributes a large number of deaths to this disease. There are 558 deaths, with a corresponding group rate of 98.8 per 100,000 population in 1906-1909. The number falls and then rises to a high point of 1,107 deaths, although the rate does not rise above that of 1906-1909, but reaches 89.3 per 100,000 group population. Both numbers and rates then fall to 346 and 20.1, respectively, in 1930-1934. The percentage drop in rate from 1906-1909, when it is 42.8, to 12.0 per 100,000 population in 1930-1934, is the smallest of the three groups, being 72.0 per cent decrease.

The age group 5 to 14 exhibits the greatest percentage drop in rate of the three groups under study. In 1906-1909 there are 515 deaths, with a corresponding rate of 39.1. This rises in 1920-1924 to 1,569 deaths with a rate of 50.2, and then falls ten years later to 289 deaths with a rate of 6.3. This rate is 83.9 per cent lower than that of 1906-1909, and 87.4 per cent lower than the rate for the years 1920-1924. The decrease in rate in this age group is 79.7 per cent, falling from 98.8 per 100,000 population in 1906-1909 to 20.1 in 1930-1934.

Mortality from Diphtheria, 1906-1934

Years	Under 1 yr.		1-4 years		5-14 years	
	Number	Rate	Number	Rate	Number	Rate
1906-1909	63	42.8	558	98.8	516	39.1
1910-1914	47	21.6	463	54.8	406	20.6
1915-1919	63	25.0	564	55.2	537	21.9
1920-1924	95	32.0	1,107	89.3	1,569	50.2
1925-1929	57	16.2	567	37.8	545	13.7
1930-1934	48	12.0	346	20.1	289	6.3

DYSENTERY

Deaths from dysentery include all forms of dysentery, bacillary, amebic, and unspecified. These have not been

* Part I of this article was printed in the May issue of CALIFORNIA AND WESTERN MEDICINE, beginning with page 454.

segregated until recent years, although the group as a whole has been recognized.

Children under one year of age are the most susceptible to this disease when mortality rates are considered. In 1906-1909 there are eleven deaths attributed to this disease with a rate of 7.5. This rises to a peak of 114 deaths during 1920-1924, with a corresponding rate of 47.5 and then drops to 104 deaths and a rate of 26.0 per 100,000 group population during 1930-1934.

The trend of deaths in children from 1 to 4 years of age follows that of age group under one year, although the rates are lower all the way through. The lowest number of deaths is recorded during 1906-1909, with fourteen and a rate of 2.5 per 100,000 population. This rises to a high point of ninety-nine deaths and a rate of 8.0 per 100,000 population in 1920-1924, then falls to eighty-seven deaths and a mortality rate of 5.0 per 100,000 group population during 1930-1934.

Ages 5 to 14 presents a somewhat different picture, although the number of deaths involved is small. During the four years of 1906-1909, there are four deaths from dysentery, with a rate of 0.3 per 100,000 group population. This rate remains stationary until 1920-1924, when it rises to a rate of 0.5 per 100,000 group population and sixteen deaths. After a drop during the next quinquennium, there is a further rise to a high of twenty-seven deaths and a mortality rate of 0.6 per 100,000 group population. The differences in rate throughout this age group during the period under observation are so small that they are probably not significant.

Mortality from Dysentery, 1906-1934

Years	Under 1 yr.		1-4 years		5-14 years	
	Number	Rate	Number	Rate	Number	Rate
1906-1909	11	7.5	14	2.5	4	0.3
1910-1914	44	20.3	47	5.6	6	0.3
1915-1919	76	30.1	66	6.5	8	0.3
1920-1924	141	47.5	99	8.0	16	0.5
1925-1929	115	32.7	97	6.5	14	0.4
1930-1934	104	26.0	87	5.0	27	0.6

ACUTE ANTERIOR POLIOMYELITIS

Statistics on this disease are available only since 1921, so the study is limited to a period of fourteen years. For uniformity with other diseases studied, the four-year period comes first, followed by two five-year periods. All three age groups under fifteen years present the same picture, that of low number of deaths and rate, followed by a fairly large number of deaths and then receding almost to the same rate as in the initial period. Rates are about the same for infants under one year and children under four years, but are lower for those 5 to 14 years although the number of deaths is greater.

In 1921-1924 there are eight deaths in infants under one year, with a rate of 3.3 per 100,000 group population. This rises during 1925-1929 to thirty-four deaths, rate 9.7 per 100,000 group population, and then recedes to nineteen deaths, with a corresponding rate of 4.8 poliomyelitis deaths per 100,000 group population in 1930-1934.

Groups 1 to 4 present a similar picture with 46, 143, and 76 deaths, and corresponding rates of 4.5, 9.5, and 4.4 deaths per 100,000 group population during the period 1921-1924, 1925-1929, and 1930-1934, respectively.

Mortality from Acute Anterior Poliomyelitis (Infantile Paralysis) 1921-1934

Years	Under 1 yr.		1-4 years		5-14 years	
	Number	Rate	Number	Rate	Number	Rate
1921-1924	8	3.3	46	4.5	57	2.2
1925-1929	34	9.7	143	9.5	215	5.4
1930-1934	19	4.8	176	4.4	120	2.6

Death rates from poliomyelitis are lower in the group 5 to 14 years than they are in the two younger groups, although the actual numbers of deaths exceed the sum of the deaths in these two groups. There are fifty-seven deaths, rate 2.2 per 100,000 group population in 1921-1925 followed by 215 deaths with a rate of 5.4 per 100,000 group population in 1925-1929 and a drop in 1930-1934 to 120 deaths, with a corresponding rate of 2.6 per 100,000 group population.

EPIDEMIC ENCEPHALITIS

(Encephalitis Lethargica) Sleeping Sickness

Statistics for this disease are available over a period of fourteen years only, as are those for acute anterior

poliomyelitis (infantile paralysis) and meningococcic meningitis (epidemic or cerebrospinal meningitis). Differing from poliomyelitis there is a higher death rate among those children under one than there is in those from one to four years of age, while the rate distribution among the age groups is similar to that of epidemic poliomyelitis.

Beginning with seventeen deaths of infants under one year of age, we find a rate of 7.0 per 100,000 group population in 1921-1924. This recedes through sixteen deaths, rate 4.6 to one death and a rate of 0.2 per 100,000 group population 1930-1934.

Age group 1 to 14 exhibits a similar trend. There are thirty-seven deaths, with a rate of 3.6 per 100,000 group population in 1921-1924. This drops to thirty-three deaths, rate 2.2, and then goes to twenty-four deaths, 1.4 per 100,000 group population.

This story is repeated in age group 5 to 14 with similar numbers, but lower rates.

Mortality from Epidemic Encephalitis (Encephalitis Lethargica, Sleeping Sickness), 1921-1934

Years	Under 1 yr.		1-4 years		5-14 years	
	Number	Rate	Number	Rate	Number	Rate
1921-1924	17	7.0	37	3.6	41	1.6
1925-1929	16	4.6	33	2.2	31	0.8
1930-1934	1	0.2	24	1.4	11	0.2

EPIDEMIC MENINGITIS

Death rates from this cause run higher in infants under one year of age than they do in either acute anterior poliomyelitis or lethargic encephalitis. The years 1921-1924 show thirty-four deaths with a rate of 41.1. This rises to sixty-eight deaths with 19.3 deaths per 100,000 group population in 1925-1929 and then falls slightly to sixty-seven deaths with corresponding rates of 16.8 deaths per 100,000 group population. Such a sustained death rate is somewhat surprising in this age group.

In the age group 1 to 4 years the death rate is much lower, although it follows the same trend. In 1921-1924 there are thirty-five deaths, giving a death rate of 3.5 per 100,000 group population. This rises to 118 deaths and 7.9 deaths per 100,000 group population during 1925-1929, and then falls to eighty deaths with a rate of 4.6 per 100,000 group population.

Age group 5 to 14 shows a slightly higher number of deaths in each period, but the rates are very low. In 1921-1924 there are forty-six deaths and a death rate of 1.8 per 100,000 group population. This rises to 151 deaths and a rate of 3.8 per 100,000 group population and then recedes to ninety-seven deaths, with a corresponding rate of 2.1 per 100,000 group population.

Mortality from Meningococcic Meningitis, 1921-1934

Years	Under 1 yr.		1-4 years		5-14 years	
	Number	Rate	Number	Rate	Number	Rate
1921-1924	34	14.1	35	3.5	46	1.8
1925-1929	68	19.3	118	7.9	151	3.8
1930-1934	67	16.8	80	4.6	97	2.1

TUBERCULOSIS

Tuberculosis is the greatest cause of deaths among the communicable diseases in children under fifteen years of age. During the period of 1930-1934, acute poliomyelitis, lethargic encephalitis and epidemic meningitis account for 495 deaths, while tuberculosis, with effects as appalling as those of these three diseases, causes 2,233 deaths in the same age group. It would seem that the reduction which has been accomplished has nearly wiped out this as a cause of death among children, but it is apparent that there are still more deaths from tuberculosis than there are from measles, whooping-cough and diphtheria combined during the same period, 1930-1934. To be sure, we have reduced the death rate from this disease in the age groups under fifteen, but it still stands as the most prolific cause of death among the communicable diseases. In 1906-1909 there are 1,676 deaths of children under fifteen years of age with a mortality rate of 82.5 per 100,000 group population, and this is changed to 2,233 deaths with a rate of 32.9 per 100,000 group population, or a reduction in the mortality rate of 60.1 per cent.

(To be concluded)